

6331034

**WEST**



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L19: Entry 2 of 3

File: USPT

Nov 20, 2001

DOCUMENT-IDENTIFIER: US 6319570 B1

TITLE: Liquid crystalline compound, liquid crystal composition comprising the liquid crystal-line compound, and liquid crystal display device using the liquid crystal composition

Brief Summary Text (18):

As a new method to solve the problems, In-Plane Switching (IPS) driving has recently come to attract public attention (R. Kiefer et al., JAPAN DISPLAY '92, 547 (1992); G. Baur, Freiburger Arbeitstagung Flüssigkristalle, Abstract No. 22 (1993)). As characteristics in the structure of liquid crystal panels of the IPS drive, the fact that whereas an electrode is disposed on both upper and lower substrates, respectively, in conventional liquid crystal panels, a comb-shape electrode is disposed on the substrate only at one side in the IPS drive, and the fact that the direction of major axis of liquid crystal molecules is all the time in parallel to the substrates in the IPS drive can be mentioned. As advantages of the IPS drive,

Brief Summary Paragraph Table (7):

3-H2B(F)EB(2F, 3F)-O2 4.0% 5-HVHEB(2F, 3F)-O2 4.0% 5-HBCF2OB(2F, 3F)-O2 4.0%  
5-BEB(F)-C 5.0% V-HB-C 11.0% 5-PyB-C 6.0% 4-BB-3 11.0% 3-HH-2V 6.0% 5-HH-V 11.0%  
V-HHB-1 7.0% V2-HHB-1 11.0% 3-HHB-1 5.0% 1V2-HHB-2 10.0% 3-HHEBH-3 5.0%

Brief Summary Paragraph Table (8):

3-H2B(F)EB(2F, 3F)-O2 7.0% 2O1-BEB(F)-C 5.0% 3O1-BEB(F)-C 12.0% 5O1-BEB(F)-C 4.0%  
1V2-BEB(F, F)-C 16.0% 3-HB-O2 10.0% 3-HH-4 3.0% 3-HHB-F 3.0% 3-HHB-1 3.0% 3-HHB-O1  
2.0% 3-HBEB-F 4.0% 3-HHEB-F 7.0% 5-HHEB-F 7.0% 3-H2BTB-2 4.0% 3-H2BTB-3 4.0%  
3-H2BTB-4 4.0% 3-HB(F)TB-2 5.0%

Brief Summary Paragraph Table (14):

3-H2B(F)EB(2F, 3F)-O2 5.0% 5-HVHEB(2F, 3F)-O2 10.0% 5-HBCF2OB(2F, 3F)-O2 10.0%  
2-HB-C 5.0% 3-HB-C 12.0% 3-HB-O2 12.0% 2-BTB-1 3.0% 3-HHB-1 3.0% 3-HHB-F 4.0%  
3-HHB-O1 2.0% 3-HHEB-F 4.0% 5-HHEB-F 4.0% 2-HHB(F)-F 7.0% 3-HHB(F)-F 7.0% 5-HHB(F)-F  
7.0% 3-HHB(F, F)-F 5.0%

Brief Summary Paragraph Table (19):

3-H2B(F)EB(2F, 3F)-O2 10.0% 7-HB(F, F)-F 5.0% 3-H2HB(F, F)-F 12.0% 3-HHB(F, F)-F  
10.0% 4-HHB(F, F)-F 5.0% 3-HBB(F, F)-F 10.0% 3-HHEB(F, F)-F 10.0% 4-HHEB(F, F)-F  
3.0% 5-HHEB(F, F)-F 3.0% 2-HBEB(F, F) 3.0% 3-HBEB(F, F) 5.0% 5-HBEB(F, F) 3.0%  
3-HDB(F, F) 15.0% 3-HHBB(F, F)-F 6.0%

Brief Summary Paragraph Table (20):

5-HBCF2OB(2F, 3F)-O2 10.0% 3-BCF2OB(2F, 3F)-O2 10.0% 3-HHB(F, F)-F 9.0% 3-H2HB(F,  
F)-F 8.0% 4-H2HB(F, F)-F 8.0% 5-H2HB(F, F)-F 8.0% 3-HBB(F, F)-F 11.0% 5-HBB(F, F)-F  
10.0% 3-H2BB(F, F)-F 10.0% 5-HHBB(F, F)-F 3.0% 5-HHEBB-F 2.0% 3-HH2BB(F, F)-F 3.0%  
1O1-HBBH-4 4.0% 1O1-HBBH-5 4.0%

Brief Summary Paragraph Table (26):

3-BCF2OB(2F, 3F)-O2 10.0% 3-H2B(F)EB(2F, 3F)-O2 5.0% 5-HVHEB(2F, 3F)-O2 5.0%  
5-BBCF2OB(2F, 3F)-O2 5.0% 3-DB-C 10.0% 4-DB-C 10.0% 2-BEB-C 12.0% 3-BEB-C 4.0%  
3-PyB(F)-F 6.0% 3-HEB-O2 3.0% 5-HEB-O2 4.0% 5-HEB-5 5.0% 4-HEB-5 5.0% 10-BEB-2 4.0%  
3-HHB-1 3.0% 3-HHEBB-C 3.0% 3-HBEBB-C 3.0% 5-HBEBB-C 3.0%

Brief Summary Paragraph Table (27):

3-H2HCF2OB(2F, 3F)-O2 10.0% 3-HVBCF2OB(2F, 3F)-O2 5.0% 5-H2BCF2OB(2F, 3F)-O2 5.0%  
3-HHBCF2OB(2F, 3F)-O2 3.0% 2O1-BEB(F)-C 5.0% 3O1-BEB(F)-C 12.0% 5O1-BEB(F)-C 4.0%  
1V2-BEB(F, F)-C 10.0% 3-HH-EMe 5.0% 3-HB-O2 18.0% 7-HEB-F 2.0% 3-HHEB-F 2.0%

5-HHEB-F 2.0% 3-HBEB-F 4.0% 2O1-HBEB(F)-C 2.0% 3-HB(F)EB(F)-C 2.0% 3-HBEB(F, F)-C 2.0% 3-HHB-F 2.0% 3-HHB-3 1.0% 3-HEBEB-F 2.0% 3-HEBEB-1 2.0%

Brief Summary Paragraph Table (29):

3-B(F) EB(2F, 3F)-O2 5.0% 5-HVBEB(2F, 3F)-O2 5.0% 5-H4HB(F, F)-F 7.0% 5-H4HB-OCF3 15.0% 3-H4HB(F, F)-CF3 3.0% 3-HB-CL 6.0% 5-HB-CL 4.0% 2-H2BB(F)-F 5.0% 3-H2BB(F)-F 10.0% 5-HVHB(F, F)-F 5.0% 3-HHB-OCF3 5.0% 3-H2HB-OCF3 5.0% V-HHB(F)-F 5.0% 3-HHB(F)-F 5.0% 5-HHEB-OCF3 2.0% 3-HBEB(F, F)-F 5.0% 5-HH-V2F 3.0%

Brief Summary Paragraph Table (33):

5-HBCF2OBH-3 7.0% 3-H2BCF2OBH-3 7.0% 3-H2BCF2OBH-5 6.0% 7-HB(F, F)-F 4.0% 3-HHB(F, F)-F 6.0% 3-H2HB(F, F)-F 5.0% 3-HBB(F, F)-F 12.0% 5-HBB(F, F)-F 12.0% 3-H2BB(F, F)-F 5.0% 4-H2BB(F, F)-F 5.0% 5-H2BB(F, F)-F 5.0% 3-HBEB(F, F)-F 2.0% 4-HBEB(F, F)-F 2.0% 5-HBEB(F, F)-F 2.0% 3-HHEB(F, F)-F 12.0% 4-HHEB(F, F)-F 4.0% 5-HHEB(F, F)-F 4.0%

Brief Summary Paragraph Table (34):

3-HBCF2OB-3 5.0% 3-BCF2OBH-5 5.0% 3-H2HB(F, F)-F 9.0% 5-H2HB(F, F)-F 8.0% 3-HHB(F, F)-F 9.0% 4-HHB(F, F)-F 5.0% 3-HH2B(F, F)-F 11.0% 5-HH2B(F, F)-F 7.0% 3-HBB(F, F)-F 14.0% 5-HBB(F, F)-F 14.0% 3-HHEB(F, F)-F 9.0% 3-HHBB(F, F)-F 2.0% 3-HH2BB(F, F)-F 2.0%

Brief Summary Paragraph Table (42):

3-HB(F, F)CF2OB-1 4.0% 3-HB(F, F)CF2OBH-3 4.0% 2-BTB(F, F)CF2OBH-2 2.0% 2-HHB(F)-F 10.0% 3-HHB(F)-F 10.0% 5-HHB(F)-F 10.0% 2-HBB(F)-F 5.0% 3-HBB(F)-F 5.0% 5-HBB(F)-F 10.0% 3-HHB(F, F)-F 7.0% 5-HHB(F, F)-F 4.0% 3-HH2B(F, F)-F 8.0% 5-HH2B(F, F)-F 8.0% 5-H2HB(F, F)-F 5.0% 5-HHEBB-F 2.0% 3-HB-O2 4.0% 3-HHB-O1 2.0%

Brief Summary Paragraph Table (48):

2-HBCF2OBH-2 6.0% 3-HBCF2OBH-3 6.0% 3-HB(F, F)CF2OBH-V 3.0% 3-HB(F, F)CF2OBH-2V1 3.0% 2O1-BEB(F)-C 4.0% 3O1-BEB(F)-C 12.0% 5O1-BEB(F)-C 4.0% 1V2-BEB(F, F)-C 15.0% 3-HHEB-F 5.0% 5-HHEB-F 5.0% 3-HBEB-F 6.0% 3-HHB-F 3.0% 3-HB-O2 10.0% 3-HH-4 5.0% 3-H2BTB-2 4.0% 3-H2BTB-3 4.0% 3-HB(F)VB-2 5.0%

Brief Summary Paragraph Table (49):

3-HBCF2OB-3 7.0% 2-HB(F)CF2OBH-2V 3.0% 3-HB(F)CF2OBH-2V1 3.0% 3-HB(F, F)CF2OBTB-3 3.0% 2-HB(F)-C 15.0% 2-HEB-F 2.4% 3-HEB-F 2.3% 4-HEB-F 2.3% 3-HHEB-F 4.0% 5-HHEB-F 4.0% 2-HHB(F)-C 12.0% 3-HHB(F)-C 12.0% 2-HHB(F)-F 10.0% 3-HHB(F)-F 10.0% 5-HHB(F)-F 10.0%

Brief Summary Paragraph Table (54):

2-HBCF2OB-2 6.0% 3-HBCF2OB-3 4.0% 5-HBCF2OBH-3 6.0% 3-DB-C 10.0% 4-DB-C 10.0% 2-BEB-C 12.0% 3-BEB-C 4.0% 3-HHEBB-C 3.0% 3-HBEBB-C 3.0% 5-HBEBB-C 3.0% 3-PyB(F)-F 6.0% 3-HEB-O4 8.3% 4-HEB-O2 6.2% 5-HEB-O1 6.2% 3-HEB-O2 5.2% 5-HEB-O2 4.1% 3-HHB-1 3.0%

Brief Summary Paragraph Table (60):

3HB(F, F)CF2OBH-3 4.0% 2-BTB(F, F)CF2OBH-2 4.0% 2-HBCF2OBTB-2 8.0% 5-HB-F 7.0% 3-HH-O1 4.0% 3-HH-O3 4.0% 5-HH-O1 3.0% 3-HHB-OCF2 5.0% 5-HHB-OCF2 5.0% 3-HHB(F, F)-OCF2 8.0% 5-HHB(F, F)-OCF2 8.0% 2-HHB-OCF3 5.0% 3-HHB-OCF3 5.0% 4-HHB-OCF3 5.0% 5-HHB-OCF3 5.0% 3-HH2B(F)-F 7.0% 5-HH2B(F)-F 8.0% 3-HHEB(F)-F 5.0%

Brief Summary Paragraph Table (62):

3-BCF2OBH-2V1 6.0% 3-HB(F, F)CF2OBH-3 3.0% 2-BTB(F)CF2OBH-2 6.0% 4-HEB(F)-F 8.0% 5-HEB(F)-F 8.0% 2-BEB(F)-C 5.0% 3-BEB(F)-C 5.0% 4-BEB(F)-C 6.0% 5-BEB(F)-C 6.0% 1O3-HB(F)-C 6.0% 3-HHEB(F)-F 5.0% 5-HHEB(F)-F 5.0% 2-HBEB(F)-C 5.0% 3-HBEB(F)-C 5.0% 4-HBEB(F)-C 5.0% 5-HBEB(F)-C 5.0% 3-HBTB-2 5.0% V2-HH-3 3.0% V2-HHB-1 3.0%

Detailed Description Paragraph Table (29):

3-H2B(F)EB(2F, 3F)-O2 3.0% 5-HVHEB(2F, 3F)-O2 3.0% 5-HBCF2OB(2F, 3F)-O2 3.0% 2O1-BEB(F)-C 5.0% 3O1-BEB(F)-C 12.0% 5O1-BEB(F)-C 4.0% 1V2-BEB(F, F)-C 10.0% 3-HEB-O4 4.0% 3-HH-EMe 6.0% 3-HB-O2 18.0% 7-HEB-F 2.0% 3-HHEB-F 2.0% 5-HHEB-F 2.0% 3-HBEB-F 4.0% 2O1-HBEB(F)-C 2.0% 3-HB(F)EB(F)-C 2.0% 3-HBEB(F, F)-C 2.0% 3-HHB-F 4.0% 3-HHB-O1 4.0% 3-HEBEB-F 2.0% 3-HEBEB-1 2.0% 3-HHB(F)-C 4.0% T.sub.NI = 78.3 (.degree. C.) .eta. = 40.6 (mPa.s) .DELTA.n = 0.116 .DELTA..epsilon. = 24.3 V.sub.th

= 0.95 (V)

**Set Name Query**

side by side

**Hit Count Set Name**

result set

*DB=USPT,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ*

<u>L26</u>	l8 same (matrix with pixels)	6	<u>L26</u>
<u>L25</u>	l8 and (matrix with pixels)	71	<u>L25</u>
<u>L24</u>	l8 and (matrix same pixels)	82	<u>L24</u>
<u>L23</u>	l8 same (matrix same pixel\$)	9	<u>L23</u>
<u>L22</u>	L20 and ips	1	<u>L22</u>
<u>L21</u>	L20 and example 28	1	<u>L21</u>
<u>L20</u>	us-6190576-\$.did.	2	<u>L20</u>
<u>L19</u>	L18 AND L8	3	<u>L19</u>
<u>L18</u>	HHEB\$	69	<u>L18</u>
<u>L17</u>	L16 AND L8	0	<u>L17</u>
<u>L16</u>	L15 OR CP\$OC\$	495	<u>L16</u>
<u>L15</u>	cp-30cf\$ OR CP-3OCF\$	10	<u>L15</u>
<u>L14</u>	cp-30cf\$	10	<u>L14</u>
<u>L13</u>	cp-30cf4	0	<u>L13</u>
<u>L12</u>	"cp-\$2ocf\$"	0	<u>L12</u>
<u>L11</u>	cp-?OCF?	0	<u>L11</u>
<u>L10</u>	l8 and cp\$	12	<u>L10</u>
<u>L9</u>	L8 and l6	0	<u>L9</u>
<u>L8</u>	in plane switching	225	<u>L8</u>
<u>L7</u>	L6 and ips	1	<u>L7</u>
<u>L6</u>	cp-\$2cf?	8	<u>L6</u>
<u>L5</u>	cp-\$OCF\$	1	<u>L5</u>
<u>L4</u>	cp-?ocf?	0	<u>L4</u>
<u>L3</u>	cp??OCF?	0	<u>L3</u>
<u>L2</u>	L1 and ips	0	<u>L2</u>
<u>L1</u>	us-5714087-\$.did. or us-5350535-\$.did. or us-5520846-\$.did. or us-5520846-\$.did. or us-5397505-\$.did.	8	<u>L1</u>

END OF SEARCH HISTORY